CANCER IN THE COMMONWEALTH

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The Commonwealth's community of nations provides a unique opportunity for collaboration in research and training between high-income, technologically advanced countries and the middle- and low-income countries that are set to bear a disproportionate share of its cancer burden. Evidence-based practice would be strengthened by more accurate cancer registration and scientific research synthesis. The challenge facing its leadership is how to inspire the timely development of resources by the governments of its Member States.

The Commonwealth is a voluntary association of governments. With a combined head count of 2.3 billion, its 52 Member States represent nearly a third of the global population and over a quarter of the counties of the world *(1)*. In terms of healthcare, the heterogeneity of this unique grouping is more significant than its magnitude. The Commonwealth includes countries in every continent and hemisphere, in widely varying geophysical environments, with societies of differing sociocultural norms, demographic profiles and levels of political and economic development. In July 2017, the World Bank classified 14 Commonwealth Member States as high-income countries (HIC) with an annual gross national income (GNI) per capita of US$ 12,236 or more; 17 as upper middle-income countries (UMI) with a GNI per capita between US$ 3,956 and US$ 12,235; 15 as lower middle-income countries (LMI) with a GNI per capita between US$ 1,006 and US$ 3,955; and six as low-income counties (LIC) with a GNI per capita of US$ 1,005 or less *(2)*.

Cancer registration

Governments require reliable evidence in order to make informed decisions *(3)*. Regrettably, Commonwealth cancer registry data remains incomplete and of variable quality. The International Agency for Research on Cancer's (IARC) Globocan 2012 database does not include data on 11 of the 52 Commonwealth Member States (Antigua and Barbuda, Dominica, Grenada, Kiribati, Nauru, Saint Lucia, St Kitts and St Nevis, St Vincent and The Grenadines, Seychelles, Tonga, and Tuvalu); smaller countries that have an estimated combined population of 924,874 (2015) *(4)*. Some of the data from the 41 Commonwealth countries that are presented in Globocan may be based on regional estimates. The data from only six of the 40 Commonwealth Member States (Australia, Canada, Malta, New Zealand, Singapore and the United Kingdom) represented in Globocan 2012 are accorded the highest "A-1-1-1" score by IARC for the availability of incidence and mortality data at the country level *(5)*.

With these caveats, Globocan data indicates that in 2012 the 41 Commonwealth Member States it reports on had 2,423,557 new cases of cancer and 1,479,496 deaths from cancer *(6)*. Looking forward to 2035, cancer incidence in these 41 countries is predicted to rise by 78% to 4,312871 new cases per annum and cancer mortality by 83% to 2,696,496 deaths per annum. These increases are significantly higher than the predicted increases in global incidence of 70% (14,067,894 (2012) to 23,980,858 (2035)) and 78% in global mortality (8,201,575 (2012) to 14,634,144 (2035)) *(6)*.

These predicted increases in cancer burden will not be uniform across the board. Whereas in high-income Commonwealth Member States, such as the United Kingdom and Canada, the estimated number of new cases is expected to rise by 37% and 59% respectively (UK: from 327,812 (2012) to 449, 508 (2035); Canada: from 182,182 (2012) to 290,565 (2035)). Less wealthy Member States, such as Malawi and Papua New Guinea will see their cancer incidence double in size over the same period (Malawi: from 15,349 (2012) to 30,980 (2035); Papua New Guinea: from 7,365 (2012) to 14,719 (2035)) *(6)*.

Cervical cancer

Cervical cancer is the most easily preventable cancer through HPV vaccination and community screening. In 2012 Commonwealth countries carried a 40% share (208,807 new cases) of global cervical cancer incidence and 43% of global cervical cancer mortality (115,275 deaths) and over half a million women were living with cervical cancer in the Commonwealth (5-year prevalence: 542,090). Globocan data estimates that within the Commonwealth cervical cancer is the leading female cancer in 13 Member States, the second-most common in 18 Member States, and the leading, or second-

highest cause of death from cancer, in females in 29 Member States.

There is a strong association between Gross National Income (GNI) and cervical cancer. Of the 31 Commonwealth Member States where Globocan estimates cervical cancer is either the leading or the second-most common female cancer, only three (The Bahamas, Brunei Darussalam and Trinidad and Tobago) are classified as high-income countries by the World Bank. The same pattern applies to mortality. Of the 29 Commonwealth Member States where cervical cancer is either the leading or the second-most common cause of female cancer deaths, only one is a high-income economy (Trinidad and Tobago). The six Commonwealth Member States with the highest number of cervical cancer cases and deaths are India, Nigeria, Bangladesh, South Africa, Tanzania and Mozambique.

The percentage increase in new cases of cervical cancer within the Commonwealth during the period 2012–2035 is predicted to be 66% (208,788 to 347,645) which far exceeds the estimated global increase of 43% (527,624 to 756,273 new cases). Similarly, Commonwealth deaths from cervical cancer will rise by 75% (114,875 to 201,568 deaths) over the same period; this is much higher than the global percentage increase of 56% (265,672 to 416,061 deaths) predicted by IARC

Scientific research

Increasingly, policy-makers and parliamentarians are requiring evidence of the effectiveness of interventions presented in primary or secondary research *(2)*. Commonwealth countries make a major contribution to the published literature on cancer control in low- and middle-income countries (LMIC). An electronic search conducted by INCTR UK of four bibliographic databases (Pubmed, Embase, African Journals Online and WHO's African Index Medicus) for evidence published between 2000 and 2016 relevant to cervical cancer and other HPV-linked cancers in sub-Saharan Africa identified 1,656 reports of research. Of these, 1,414 (85%) reports related to populations or patients in African Commonwealth Member States. Many of the reports of the cancer control research conducted in LMICs lie scattered across the biomedical literature in different databases, conference proceedings and university archives *(7)*. Difficulty in accessing the results of research can lead to missed opportunities to build on proven strategies, or to wasteful duplication of effort. INCTR's search identified 134 reports (101 full articles and 33 conference proceedings) concerning the level of public and professional knowledge/awareness/attitudes/behaviour/ practice (KAABP) surrounding HPV and cervical cancer in Nigeria. This tall pile of papers represents a substantial amount of evidence that deserves to be systematically reviewed and the results considered by policy-makers and research commissioners.

Economic growth and urbanization

Although 38 Commonwealth countries are classified as low- and middle-income countries, the combined gross domestic product of Commonwealth Member States is estimated at US$ 10.4 trillion in 2017 and predicted to reach US$ 13 trillion in 2020. Commonwealth membership has advantages: bilateral costs for trading partners in Commonwealth countries are on average 19% less than between those in non-member countries. Half of the top 20 global emerging cities are in the Commonwealth: New Delhi, Mumbai, Nairobi, Kuala Lumpur, Bangalore, Johannesburg, Kolkata, Cape Town, Chennai and Dhaka *(8)*. Urbanization and overcrowding inevitably increases population exposure to the known risk factors for cancer and other NCDs: poor diet, excessive alcohol consumption, less exercise, increased exposure to manufactured tobacco products. It is these cities, and cities like these, that will fuel the coming wave of cancer incidence in sub-Saharan Africa, India and South East Asia. For as long as labour remains a factor of production or service provision, the health of the national workforce will remain integral to the development of successful economies. The steadily rising incidence of cancers in Commonwealth Member States is already a cause for concern. It deserves attention as an important health and economic problem that needs to be controlled, and this is a job for government. The identification and implementation of innovative cost-effective strategies to prevent and reduce cervical cancers, in particular, will benefit all Commonwealth Member States by highlighting women's health issues and reproductive health, reducing family poverty, and helping Member States with their target of controlling non-communicable diseases in their countries *(9)*.

What is to be done?

Due to its size and composition the Commonwealth enjoys several advantages that make it uniquely suitable for research into the causes and various approaches to the control of cancers *(10)*. Healthcare interventions that test successfully across the diversity of the Commonwealth Member States offer gains for the global economy, as well as a benefit to individual cancer patients and their families. The decision taken by the Commonwealth Health Ministers in Geneva on 21 May 2017 that the theme for their 2018 Meeting should be "*Enhancing the global fight against NCDs; raising awareness, mobilizing resources and ensuring accessibility to universal coverage*" provides a timely opportunity to explore novel strategies for collaboration.

A Commonwealth economic committee for cancer control should be formed in order to take maximum advantage of the heterogeneity of differences in national cancer patterns and economic development. The establishment of a Commonwealth Cancer Fund with a sliding scale of contributions, ranging

from US$ 100,000 from the high-income member states to US$ 25,000 from the low-income countries, would amass an annual pot of over US$ 3 million that could be used to leverage additional funding and resources from non-State actors. By this method modest contributions can build up capacity in cancer control in the smaller and less economically advantaged Member States through skills training and multilateral aid.

Cancers can be very costly to treat. Ministers and parliamentarians have a right to expect good-quality evidence when considering their nation's cancer burden and not to have to rely upon incomplete or regional estimates. Every Commonwealth Member State should have a well-functioning population-based cancer registry reporting data that broadly represents its population, in order to inform public investment decisions in cancer prevention and control, and to assist its government in keeping up its national commitments as part of the Global NCD initiative agreed at the UN High Level meeting in 2011. To this end, given the large number of the world's nations belonging to the Commonwealth, it would be helpful for IARC to introduce the classification "Commonwealth Member State" to its Globocan matrix so that estimates of cancer incidence, prevalence and mortality in these countries can more easily be compared with regional and global estimates.

Whereas the scientific research evidence from high-income countries are relatively easy to retrieve, the Commonwealth Secretariat could make a major contribution by working with in-country experts and non-State actors to facilitate the identification of existing reports of research conducted in, or relevant to, the populations of its low- and middle-income Members States, and make them more easily accessible to policy-makers through the Commonwealth's own information hub.

Despite the launch of the Commonwealth Charter in 2013 and the adoption of the UN's Sustainable Development Goals, poverty remains pervasive in many Commonwealth countries *(11)*. The increases in cervical cancer incidence and mortality facing the Commonwealth will be disproportionate, with the poorest Member States experiencing a doubling of new cases and deaths compared to increases of 22% in total incidence and 44% in total mortality in the high-income Commonwealth Member States *(6)*. The challenge facing all the Commonwealth Member States is the timely development of a level of resources that can match the predicted increase in their individual burdens of disease. Commonwealth Member States should show a sense of urgency in addressing cervical cancer and not be satisfied with achieving the global goals that have been developed under the UN Global NCD initiative.

Forewarned should mean forearmed and the Commonwealth is a voluntary association of governments, not of peoples. The time has come for Commonwealth governments to summon the collective political will to call for a Cancer Summit to explore whether this challenge can be addressed in partnership with, or with the assistance of, other Commonwealth Member States. ■

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